AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in this application:

LISTING OF CLAIMS:

1. (Previously Presented) A method for analyzing a drive system by determining an open loop transfer function of a target system that is part of the drive system in a closed loop configuration, comprising:

successively applying a plurality of noise signals to the drive system as input signals, the noise signals covering different frequency ranges; and

determining a transfer function of a target system within the drive system in accordance with the noise signals applied to the drive system in the applying step;

wherein the transfer function of the target system in an open control loop is determined in accordance with difference signals applied to the target system and corresponding output signals; and

wherein the determining step includes evaluating a frequency-dependent attenuation and a phase shift between the difference signals and the output signals.

2. (Original) The method according to claim 1, wherein the noise signals have different intensities.

3. (Original) The method according to claim 2, further comprising optimizing the intensities by increasing the intensities in steps until a maximum value of a limiting parameter of the drive system is near a limiting value.

4. (Previously Presented) A method for analyzing a drive system, comprising:

successively applying a plurality of noise signals to the drive system as input signals, the noise signals covering different frequency ranges; and

determining a transfer function of a target system within the drive system in accordance with the noise signals applied to the drive system in the applying step;

wherein the noise signals include noises in several frequency bands that always begin at a same lower cutoff frequency and end at a different upper cutoff frequency, the input signal having a widest frequency band completely covering a frequency range to be tested.

5. (Currently Amended) [[A]] The method according to claim 1, ~~for analyzing a drive system, comprising:~~

~~successively applying a plurality of noise signals to the drive system as input signals, the noise signals covering different frequency ranges; and~~

~~determining a transfer function of a target system within the drive system in accordance with the noise signals applied to the drive system in the applying step;~~

wherein the noise signals include one of (a) non-overlapping frequency ranges and (b) frequency ranges that overlap slightly, the frequency ranges together covering a frequency range to be tested.

Claims 6 and 7. (Canceled).

8. (Previously Presented) A device for analyzing a drive system by determining an open loop transfer function of a target system that is part of the drive system in a closed loop configuration, comprising:

an arrangement configured to successively apply a plurality of noise signals to the drive system as input signals, the noise signals covering different frequency ranges; and

an arrangement configured to determine a transfer function of a target system within the drive system in accordance with the noise signals applied to the drive system, the transfer function of the target system in an open control loop determined in accordance with difference signals applied to the target system and corresponding output signals, the determination including an evaluation of a frequency-dependent attenuation and a phase shift between the difference signals and the output signals.

9. (Previously Presented) A device for analyzing a drive system by determining an open loop transfer function of a target system that is part of the drive system in a closed loop configuration, comprising:

means for successively applying a plurality of noise signals to the drive system as input signals, the noise signals covering different frequency ranges; and

means for determining a transfer function of a target system within the drive system in accordance with the noise signals applied to the drive system;

wherein the transfer function of the target system in an open control loop is determined by the determining means in accordance with difference signals applied to the target system and corresponding output signals; and

wherein the determining includes evaluating a frequency-dependent attenuation and a phase shift between the difference signals and the output signals.